PATENT
09/213,846

This is in response to the Official Action mailed February 26, 2004.

REMARKS

The rejection of claims 1-9 as unpatentable under 35 U.S.C. 103(a) as obvious over Goldhor et al. (US 5,231,670) in view of White (US5,386,494) is respectfully traversed.

The basic Goldhor et al. patent may be directed to similar subject matter as the present invention. However, it is not directed to the same problems as the present invention, and does not disclose any solution over which the present invention would be obvious.

It should be noted that the present invention is not primarily concerned with speech dictation or "speech to text" recognition systems wherein the spoken terms are recognized for word processing purposes. Rather, the present invention is directed to speech or voice recognition of spoken commands used to control systems for a wide variety of purposes including control commands which could be used for the control of speech recognition word processing systems. Applicants make this distinction because the Goldhor system deals with both command recognition and spoken text recognition. However, Goldhor et al. deal with command recognition and processing in a manner quite different from Applicants' processing of commands. As will be hereinafter shown, the Examiner in applying Goldhor's disclosure does not distinguish Goldhor's processing of commands from Goldhor's processing of spoken text and seems to be inappropriately combining elements from Goldhor's command processing with Goldhor's spoken text processing in the attempt to anticipate Applicants' invention.

The present invention is directed to command control technology, wherein, for example, a user may navigate

through a computer system's graphical user interface (GUI) by the user speaking the commands which are customarily found in the systems' menu text, icons, labels, buttons, etc.. Many deficiencies in speech recognition both in word processing and in command technologies result from inherent voice recognition errors due in part to the status of the technology and in part to the variability of user speech patterns and the user's ability to remember the specific commands necessary to initiate actions. In word processing, visual feedback which confirms input is inherent, since the purpose of the process is to translate from the spoken to the visual. However, in speech recognition driven command and control systems, the user must often refer to command menus to find appropriate commands for his purposes. Thus, there is a constant need for switching back and forth from a natural speech input mode of operation to command menus. To do this, the user must make a sequence of manual inputs through his mouse and/or keyboard. Such manual operations still get in the way of interactive users who, because of a lack of computer skills or other reasons, wish to relate to the computer system in a fully voice activated or conversational manner.

The present invention provides a solution for users of voice recognition systems who still need visual feedback in order to confirm the accuracy of spoken commands but need to operate in a "hands-off" mode with respect to computer input. In an interactive computer controlled display system with speech command input recognition, the present invention provides a system for confirming the recognition of a command by first predetermining a plurality of speech commands for respectively designating each of a corresponding plurality of system actions and providing means for detecting such speech commands. There also are

means responsive to a detected speech command for displaying said command for a predetermined time period, during which time the user may give a spoken command to stop the system action designated by said displayed command. If the system action is not stopped during said predetermined time period, the system action designated by the displayed command will be executed.

The Examiner contends that the only shortcoming of the Goldhor patent is that it does not explicitly teach displaying the spoken commands. Applicants take issue with this simplification and submit that the disclosure of Goldhor et al. fails to suggest the present invention in at least three significant elements:

- Goldhor et al. fails to disclose the display of commands.
- It does not disclose the recognized command displayed for a predetermined time period.
- It does not disclose executing the action designated by displayed command if not stopped by a voice command

Goldhor et al. does not disclose displaying commands for any predetermined time period or executing the actions designated by the commands if not stopped during time period. In this connection, the Examiner has pointed to col. 5, lines 40-55 for this disclosure. When this section discusses displaying sets of candidates and best match candidates, it is discussing only the conventional text processing expedient of presenting candidates for detected spoken vocabulary words. Nowhere is there any discussion of displaying commands for any purpose.

Actually, in the whole related section, col 5, lines 17-55 referenced by the Examiner, Applicants can not find any reference to the display of anything for a predetermined

period of time, let alone the execution of a command if such execution is not stopped during that period of time.

The White reference does disclose display of spoken commands but it does not disclose or suggest displaying recognized command for a predetermined time period or executing the action designated by displayed command if not stopped by a voice command.

In White, the user must depress the voice button 28 on the positioning device 24 in order to use all of the voice functions. While the voice button 28 is depressed, all of the voice functions including display of the command are operable. Upon the release of the voice button 28, all voice functions cease including the display of the spoken commands. Thus, White fails to disclose the display of the recognized command for a predetermined period of time; The time is determined only by how long the user depresses the button. Also, there is no teaching of any sort of voice command to stop the displayed command in White. The execution of the displayed command in White may be stopped only by releasing the voice button; there is no voice command.

Thus, even if the teachings of and Goldhor and White could be combined, there would be no teaching of displaying recognized command for a predetermined time period or executing the action designated by displayed command if not stopped by a voice command.

Claims 3, 6, and 9 may be further distinguished over the combination of references in that the voice command for stopping the execution of the displayed action is a spoken repetition of the displayed command. Examiner points to col 5, lines 29-39 in Goldhor for such a suggestion. All this section discloses is a very general disclosure that in a system which does not display commands, the user may set up

any spoken event to trigger another event. Applicant suggests that this is not even a very remote suggestion of this additional aspect of the present invention.

In view of the foregoing, claims 1-9, all of the claims in the present patent application are submitted to be in condition for allowance, such allowance is respectfully requested.

Respectfully submitted,

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